ELSEVIER

Author Index for Volumes 67–70

Aas, E., Høkedal, J.: Reflection of Spectral Sky Irradiance on the Surface of the Sea and Related Properties, 70:181
Abadía, J.: *See* Morales, F.
Abdalati, W., Krabill, W. B.: Calculation of Ice Velocities in the Jakobshavn Isbrae Area Using Airborne Laser Altimetry, 67:194
Abuelgasim, A. A., Ross, W. D., Gopal, S., Woodcock, C. E.: Change Detection Using Adaptive Fuzzy Neural Networks: Environmental Damage Assessment after the Gulf War, 70:208
Acker, S. A.: *See* Lefsky, M. A.
Acker, S. A.: *See* Means, J. E.
Ackerman, S. A.: *See* Riggs, G. A.
Ainsworth, T. L.: *See* Schuler, D. L.
Akiyama, T.: *See* Shibayama, M.
Alanen, M.: *See* Shibayama, M.
Amano, E., Salvucci, G. D.: Detection and Use of Three Signatures of Soil-Limited Evaporation, 67:108
Aplin, P., Atkinson, P. M., Curran, P. J.: Fine Spatial Resolution Simulated Satellite Sensor Imagery for Land Cover Mapping in the United Kingdom, 68:206
Asner, G. P.: *See* Mesarch, M. A.
Atkinson, P. M.: *See* Aplin, P.

Bakwin, P. S.: *See* Running, S. W.
Baldocchi, D. D.: *See* Running, S. W.
Banerjee, B.: *See* Deering, D. W.
Barbosa, P. M., Grégoire, J.-M., Pereira, J. M. C.: An Algorithm for Extracting Burned Areas from Time Series of AVHRR GAC Data Applied at a Continental Scale, 69:253
Baret, F.: *See* Weiss, M.
Barton, I. J., Prata, A. J.: Difficulties Associated with the Application of Covariance–Variance Techniques to Retrieval of Atmospheric Water Vapor from Satellite Imagery, 69:76
Bauer, M.: Preface to Special Issue: Spectral Signatures of Objects, 68:193
Bauer, M. E.: Editorial: Editorial Board and Associate Editor Changes, 67:123
Baugh, K. E.: *See* Elvidge, C. D.
Becker, F.: *See* Li, Z.-L.
Becker, F.: *See* Seguin, B.
Belkhodja, R.: *See* Morales, F.
Ben-Dor, E.: *See* Karnieli, A.
Bertuzzi, P.: *See* Wigneron, J.-P.
Bicheron, P., Leroy, M.: A Method of Biophysical Parameter Retrieval at Global Scale by Inversion of a Vegetation Reflectance Model, 67:251
Blackburn, G. A.: Relationships between Spectral Reflectance and Pigment Concentrations in Stacks of Deciduous Broadleaves, 70:224
Blackburn, G. A., Steele, C. M.: Towards the Remote Sensing of Matorral Vegetation Physiology: Relationships between Spectral Reflectance, Pigment, and Biophysical Characteristics of Semiarid Bushland Canopies, 70:278
Blair, J. B.: *See* Means, J. E.
Bland, T.: *See* Elvidge, C. D.
Boegh, E., Soegaard, H., Hanan, N., Kabat, P., Lesch, L.: A Remote Sensing Study of the NDVI–*T*, Relationship and the Transpiration from Sparse Vegetation in the Sahel Based on High-Resolution Satellite Data, 69:224
Bolstad, P.: *See* Reich, P. B.
Bolstad, P. V.: *See* Thomlinson, J. R.
Bond, B.: *See* Ganapol, B. D.
Bouman, B. A. M., van Kraalingen, D. W. G., Stol, W., van Leeuwen, H. J. C.: An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, 67:137
Bourgeau-Chavez, L. L. *See* French, N. H. F.
Boyce, M. S.: *See* Radeloff, V. C.
Breed, C. S.: *See* Schaber, G. G.
Briggs, J. M.: *See* Olson, R. J.
Briggs, J. M.: *See* Turner, D. P.
Broche, P.: *See* Forget, P.
Buschmann, C.: *See* Gitelson, A. A.

Carder, K.: *See* Zhang, M.
Carlson, T. N., Sanchez-Azofeifa, G. A.: Satellite Remote Sensing of Land Use Changes in and around San José, Costa Rica, 70:247
Carpenter, G. A., Gopal, S., Macomber, S., Martens, S., Woodcock, C. E.: A Neural Network Method for Mixture Estimation for Vegetation Mapping, 70:138
Carpenter, G. A., Gopal, S., Macomber, S., Martens, S., Woodcock, C. E., Franklin, J.: A Neural Network Method for Efficient Vegetation Mapping, 70:326

REMOTE SENS. ENVIRON. 70:362–367 (1999)
©Elsevier Science Inc., 1999
655 Avenue of the Americas, New York, NY 10010

0034-4257/99/$–see front matter

ELSEVIER

Author Index for Volumes 67–70

Aas, E., Høkedal, J.: Reflection of Spectral Sky Irradiance on the Surface of the Sea and Related Properties, 70:181
Abadía, J.: *See* Morales, F.
Abdalati, W., Krabill, W. B.: Calculation of Ice Velocities in the Jakobshavn Isbrae Area Using Airborne Laser Altimetry, 67:194
Abuelgasim, A. A., Ross, W. D., Gopal, S., Woodcock, C. E.: Change Detection Using Adaptive Fuzzy Neural Networks: Environmental Damage Assessment after the Gulf War, 70:208
Acker, S. A.: *See* Lefsky, M. A.
Acker, S. A.: *See* Means, J. E.
Ackerman, S. A.: *See* Riggs, G. A.
Ainsworth, T. L.: *See* Schuler, D. L.
Akiyama, T.: *See* Shibayama, M.
Alanen, M.: *See* Shibayama, M.
Amano, E., Salvucci, G. D.: Detection and Use of Three Signatures of Soil-Limited Evaporation, 67:108
Aplin, P., Atkinson, P. M., Curran, P. J.: Fine Spatial Resolution Simulated Satellite Sensor Imagery for Land Cover Mapping in the United Kingdom, 68:206
Asner, G. P.: *See* Mesarch, M. A.
Atkinson, P. M.: *See* Aplin, P.

Bakwin, P. S.: *See* Running, S. W.
Baldocchi, D. D.: *See* Running, S. W.
Banerjee, B.: *See* Deering, D. W.
Barbosa, P. M., Grégoire, J.-M., Pereira, J. M. C.: An Algorithm for Extracting Burned Areas from Time Series of AVHRR GAC Data Applied at a Continental Scale, 69:253
Baret, F.: *See* Weiss, M.
Barton, I. J., Prata, A. J.: Difficulties Associated with the Application of Covariance–Variance Techniques to Retrieval of Atmospheric Water Vapor from Satellite Imagery, 69:76
Bauer, M.: Preface to Special Issue: Spectral Signatures of Objects, 68:193
Bauer, M. E.: Editorial: Editorial Board and Associate Editor Changes, 67:123
Baugh, K. E.: *See* Elvidge, C. D.
Becker, F.: *See* Li, Z.-L.
Becker, F.: *See* Seguin, B.
Belkhodja, R.: *See* Morales, F.
Ben-Dor, E.: *See* Karnieli, A.
Bertuzzi, P.: *See* Wigneron, J.-P.
Bicheron, P., Leroy, M.: A Method of Biophysical Parameter Retrieval at Global Scale by Inversion of a Vegetation Reflectance Model, 67:251
Blackburn, G. A.: Relationships between Spectral Reflectance and Pigment Concentrations in Stacks of Deciduous Broadleaves, 70:224
Blackburn, G. A., Steele, C. M.: Towards the Remote Sensing of Matorral Vegetation Physiology: Relationships between Spectral Reflectance, Pigment, and Biophysical Characteristics of Semiarid Bushland Canopies, 70:278
Blair, J. B.: *See* Means, J. E.
Bland, T.: *See* Elvidge, C. D.
Boegh, E., Soegaard, H., Hanan, N., Kabat, P., Lesch, L.: A Remote Sensing Study of the NDVI–*T*, Relationship and the Transpiration from Sparse Vegetation in the Sahel Based on High-Resolution Satellite Data, 69:224
Bolstad, P.: *See* Reich, P. B.
Bolstad, P. V.: *See* Thomlinson, J. R.
Bond, B.: *See* Ganapol, B. D.
Bouman, B. A. M., van Kraalingen, D. W. G., Stol, W., van Leeuwen, H. J. C.: An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, 67:137
Bourgeau-Chavez, L. L. *See* French, N. H. F.
Boyce, M. S.: *See* Radeloff, V. C.
Breed, C. S.: *See* Schaber, G. G.
Briggs, J. M.: *See* Olson, R. J.
Briggs, J. M.: *See* Turner, D. P.
Broche, P.: *See* Forget, P.
Buschmann, C.: *See* Gitelson, A. A.

Carder, K.: *See* Zhang, M.
Carlson, T. N., Sanchez-Azofeifa, G. A.: Satellite Remote Sensing of Land Use Changes in and around San José, Costa Rica, 70:247
Carpenter, G. A., Gopal, S., Macomber, S., Martens, S., Woodcock, C. E.: A Neural Network Method for Mixture Estimation for Vegetation Mapping, 70:138
Carpenter, G. A., Gopal, S., Macomber, S., Martens, S., Woodcock, C. E., Franklin, J.: A Neural Network Method for Efficient Vegetation Mapping, 70:326

REMOTE SENS. ENVIRON. 70:362–367 (1999)
©Elsevier Science Inc., 1999
655 Avenue of the Americas, New York, NY 10010

0034-4257/99/$–see front matter

Carroll, A. L.: *See* Luther, J. E.
Cechet, R. P.: *See* Prata, A. J.
Chan, S. S.: *See* Mesarch, M. A.
Chang, A.: *See* Tait, A.
Chanzy, A.: *See* Wigneron, J.-P.
Chauki, H.: *See* Olioso, A.
Chen, J. M.: Spatial Scaling of a Remotely Sensed Surface Parameter by Contexture, 69:30
Clark, R. N.: *See* Kokaly, R. F.
Clemente-Colón, P.: *See* Friedman, K. S.
Cohen, W. B., Justice, C. O.: Validating MODIS Terrestrial Ecology Products: Linking *In Situ* and Satellite Measurements, 70:1
Cohen, W. B.: *See* Lefsky, M. A.
Cohen, W. B.: *See* Means, J. E.
Cohen, W. B.: *See* Milne, B. T.
Cohen, W. B.: *See* Thomlinson, J. R.
Cohen, W. B.: *See* Turner, D. P.
Comiso, J. C.: *See* Massom, R. A.
Courault, D.: *See* Olioso, A.
Courrier, G.: *See* Duchemin, B.
Curran, P. J.: *See* Aplin, P.
Curran, P. J.: *See* Dawson, T. P.
Curran, P. J.: *See* Jago, R. A.
Cutler, M. E. J.: *See* Jago, R. A.

Dahn, H.-G.: *See* Lüdeker, W.
Dawson, T. P., Curran, P. J., North, P. R. J., Plummer, S. E.: The Propagation of Foliar Biochemical Absorption Features in Forest Canopy Reflectance: A Theoretical Analysis, 67:147
Dedieu, J. P.: *See* Fily, M.
Deering, D.: *See* Gastellu-Etchegorry, J. P.
Deering, D. W., Eck, T. F., Banerjee, B.: Characterization of the Reflectance Anisotropy of Three Boreal Forest Canopies in Spring–Summer, 67:205
Deering, D. W.: *See* Sandmeier, St.
Demarez, V.: *See* Gastellu-Etchegorry, J. P.
de Ruyter de Wildt, M.: *See* Greuell, W.
Dietz, J. B.: *See* Elvidge, C. D.
Dinguirard, M., Slater, P. N.: Calibration of Space-Multispectral Imaging Sensors: A Review, 68:194
Donald, G. E.: *See* Hill, M. J.
Drake, N. A., Mackin, S., Settle, J. J.: Mapping Vegetation, Soils, and Geology in Semiarid Shrublands Using Spectral Matching and Mixture Modeling of SWIR AVIRIS Imagery, 68:12
Duchemin, B.: NOAA-AVHRR Bidirectional Reflectance: Modeling and Application for the Monitoring of a Temperate Forest, 67:51
Duchemin, B., Goubier, J., Courrier, G.: Monitoring Phenological Key Stages and Cycle Duration of Temperate Deciduous Forest Ecosystems with NOAA/AVHRR Data, 67:68
Durand, Y.: *See* Fily, M.

Dymond, J. R., Shepherd, J. D.: Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry," by Gu and Gillespie (*Remote Sens. Environ.* 64:166–175, 1998), 69:194

Eck, T. F.: *See* Deering, D. W.
Eckardt, F. D., Milton, E. J.: The Relationship between Time Since Deglaciation and the Reflectance of Glacial Forelands, 67:244
Elvidge, C. D., Baugh, K. E., Dietz, J. B., Bland, T., Sutton, P. C., Kroehl, H. W.: Radiance Calibration of DMSP-OLS Low-Light Imaging Data of Human Settlements, 68:77
Erkkilä, A.: *See* Tokola, T.

Fahnestock, M. A.: *See* Scambos, T. A.
Fassnacht, K. S.: *See* Turner, D. P.
Ferrazzoli, P.: *See* Wigneron, J.-P.
Ferrier, G.: Application of Imaging Spectrometer Data in Identifying Environmental Pollution Caused by Mining at Rodaquilar, Spain, 68:125
Filho, R. A.: *See* Galvão, L. S.
Fily, M., Dedieu, J. P., Durand, Y.: Comparison between the Results of a Snow Metamorphism Model and Remote Sensing Derived Snow Parameters in the Alps, 68:254
Forget, P., Ouillon, S., Lahet, F., Broche, P.: Inversion of Reflectance Spectra of Nonchlorophyllous Turbid Coastal Waters, 68:264
Foster, J.: *See* Tait, A.
François, C.: *See* Ottlé, C.
Franklin, J.: *See* Carpenter, G. A.
French, N. H. F., Bourgeau-Chavez, L. L., Wang, Y., Kasischke, E. S.: Initial Observations of Radarsat Imagery at Fire-Disturbed Sites in Interior Alaska, 68:89
Friedman, K. S., Clemente-Colón, P., Pichel, W. G., Li, X.: Routine Monitoring of Changes in the Columbia Glacier, Alaska, with Synthetic Aperture Radar, 70:257
Furnival, E. P.: *See* Hill, M. J.

Galvão, L. S., Vitorello, Í., Filho, R. A.: Effects of Band Positioning and Bandwidth on NDVI Measurements of Tropical Savannas, 67:181
Ganapol, B. D., Johnson, L. F., Hlavka, C. A., Peterson, D. L., Bond, B.: LCM2: A Coupled Leaf/Canopy Radiative Transfer Model, 70:153
García-Haro, F. J., Gilabert, M. A., Meliá, J.: Extraction of Endmembers from Spectral Mixtures, 68:237
Gastellu-Etchegorry, J. P., Guillevic, P., Zagolski, F., Demarez, V., Trichon, V., Deering, D., Leroy, M.: Modeling BRF and Radiation Regime of Boreal and Tropical Forests: I. BRF, 68:281

Gastellu-Etchegorry, J. P.: *See* Guillevic, P.
Gemmell, F.: Estimating Conifer Forest Cover with Thematic Mapper Data Using Reflectance Model Inversion and Two Spectral Indices in a Site with Variable Background Characteristics, 69:105
Gemmell, F., Varjo, J.: Utility of Reflectance Model Inversion Versus Two Spectral Indices for Estimating Biophysical Characteristics in a Boreal Forest Test Site, 68:95
Gilabert, M. A.: *See* García-Haro, F. J.
Gillespie, A.: *See* Gu, D.
Gitelson, A. A., Buschmann, C., Lichtenthaler, H. K.: The Chlorophyll Fluorescence Ratio F_{735}/F_{700} as an Accurate Measure of the Chlorophyll Content in Plants, 69:296
Glaesser, C.: *See* Karnieli, A.
Goldgof, D. B.: *See* Zhang, M.
Gopal, S., Woodcock, C. E., Strahler, A. H.: Fuzzy Neural Network Classification of Global Land Cover from a 1° AVHRR Data Set, 67:230
Gopal, S.: *See* Abuelgasim, A. A.
Gopal, S.: *See* Carpenter, G. A.
Goubier, J.: *See* Duchemin, B.
Goulas, Y.: *See* Morales, F.
Gower, S. T., Kucharik, C. J., Norman, J. M.: Direct and Indirect Estimation of Leaf Area Index, f_{APAR}, and Net Primary Production of Terrestrial Ecosystems, 70:29
Gower, S. T.: *See* Running, S. W.
Goyal, S. K., Seyfried, M. S., O'Neill, P. E.: Correction of Surface Roughness and Topographic Effects on Airborne SAR in Mountainous Rangeland Areas, 67:124
Grandell, J: *See* Koskinen, J.
Grégoire, J.-M.: *See* Barbosa, P. M.
Gregoire, M.: *See* Nezlin, N. P.
Greuell, W., de Ruyter de Wildt, M.: Anisotropic Reflection by Melting Glacier Ice: Measurements and Parametrizations in Landsat TM Bands 2 and 4, 70:265
Gu, D., Gillespie, A.: Response to Dymond and Shepherd's Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry" (*Remote Sens. Environ.* 64:166–175, 1998), 69:195
Gu, X. F.: *See* Seguin, B.
Guillevic, P., Gastellu-Etchegorry, J. P.: Modeling BRF and Radiation Regime of Boreal and Tropical Forests: II. PAR Regime, 68:317
Guillevic, P.: *See* Gastellu-Etchegorry, J. P.
Günther, K. P.: *See* Lüdeker, W.
Günther, K. P.: *See* Maier, S. W.
Guyot, G.: *See* Seguin, B.

Hall, D.: *See* Tait, A.
Hall, D. K.: *See* Riggs, G. A.
Hall, F. G.: *See* Peddle, D. R.
Hallikainen, M.: *See* Koskinen, J.
Häme, T.: *See* Shibayama, M.
Hanan, N.: *See* Boegh, E.
Harari-Kremer, R.: *See* Kadmon, R.
Harding, D.: *See* Lefsky, M. A.
Harding, D. J.: *See* Means, J. E.
Harmon, M. E.: *See* Means, J. E.
Heino, S.: *See* Shibayama, M.
Hibbard, K. A.: *See* Running, S. W.
Hill, M. J., Donald, G. E., Vickery, P. J.: Relating Radar Backscatter to Biophysical Properties of Temperate Perennial Grassland, 67:15
Hill, M. J., Vickery, P. J., Furnival, E. P., Donald, G. E.: Pasture Land Cover in Eastern Australia from NOAA-AVHRR NDVI and Classified Landsat TM, 67:32
Hlavka, C. A.: *See* Ganapol, B. D.
Hoekman, D. H.: *See* van der Sanden, J. J.
Høkedal, J.: *See* Aas, E.
Huete, A. R.: *See* van Leeuwen, W. J. D.

Inoue, Y.: *See* Shibayama, M.
Iso-Iivari, L.: *See* Shibayama, M.

Jackson, T. J., Moy, L.: Dew Effects on Passive Microwave Observations of Land Surfaces, 70:129
Jago, R. A., Cutler, M. E. J., Curran, P. J.: Estimating Canopy Chlorophyll Concentration from Field and Airborne Spectra, 68:217
Jänne, S.: *See* Koskinen, J.
Johnson, L. F.: *See* Ganapol, B. D.
Jupp, D. L. B.: *See* Ni, W.
Justice, C. O.: *See* Cohen, W. B.

Kabat, P.: *See* Boegh, E.
Kadmon, R., Harari-Kremer, R.: Studying Long-Term Vegetation Dynamics Using Digital Processing of Historical Aerial Photographs, 68:164
Karnieli, A., Kidron, G. J., Glaesser, C., Ben-Dor, E.: Spectral Characteristics of Cyanobacteria Soil Crust in Semiarid Environments, 69:67
Kasischke, E. S. *See* French, N. H. F.
Kennedy, R. E.: *See* Turner, D. P.
Kerr, Y.: *See* Seguin, B.
Kidron, G. J.: *See* Karnieli, A.
King, C.: *See* Seguin, B.
King, D. J.: *See* Lévesque, J.
Klein, A.: *See* Tait, A.
Kokaly, R. F., Clark, R. N.: Spectroscopic Determination of Leaf Biochemistry Using Band-Depth Analysis of Absorption Features and Stepwise Multiple Linear Regression, 67:267
Koskinen, J., Metsämäki, S., Grandell, J., Jänne, S., Matikainen, L., Hallikainen, M.: Snow Monitoring Using Radar and Optical Satellite Data, 69:16

Kostianoy, A. G.: *See* Nezlin, N. P.
Krabill, W. B.: *See* Abdalati, W.
Kroehl, H. W.: *See* Elvidge, C. D.
Kucharik, C. J.: *See* Gower, S. T.
Kvaran, G.: *See* Scambos, T. A.

Lagouarde, J. P.: *See* Seguin, B.
Lahet, F.: *See* Forget, P.
Laing, T. W.: *See* van Leeuwen, W. J. D.
Lawrence, R. L., Ripple, W. J.: Calculating Change Curves for Multitemporal Satellite Imagery: Mount St. Helens 1980–1995, 67:309
LeDrew, E. F.: *See* Peddle, D. R.
Lee, J.-S.: *See* Schuler, D. L.
Lee, Z.: *See* Zhang, M.
Lefsky, M. A., Cohen, W. B., Acker, S. A., Parker, G. G., Spies, T. A., Harding, D.: Lidar Remote Sensing of the Canopy Structure and Biophysical Properties of Douglas-Fir Western Hemlock Forests, 70:339
Lefsky, M. A., Harding, D., Cohen, W. B., Parker, G., Shugart, H. H.: Surface Lidar Remote Sensing of Basal Area and Biomass in Deciduous Forests of Eastern Maryland, USA, 67:83
Lefsky, M. A.: *See* Means, J. E.
Lemoine, G.: *See* Wagner, W.
Leroy, M.: *See* Bicheron, P.
Leroy, M.: *See* Gastellu-Etchegorry, J. P.
Lesch, L.: *See* Boegh, E.
Lévesque, J., King, D. J.: Airborne Digital Camera Image Semivariance for Evaluation of Forest Structural Damage at an Acid Mine Site, 68:112
Li, X.: *See* Friedman, K. S.
Li, Z.-L., Becker, F., Stoll, M. P., Wan, Z.: Evaluation of Six Methods for Extracting Relative Emissivity Spectra from Thermal Infrared Images, 69:197
Lichtenthaler, H. K.: *See* Gitelson, A. A.
Lichtenthaler, H. K.: *See* Subhash, N.
Löfman, S.: *See* Tokola, T.
Lüdeker, W., Dahn, H.-G., Günther, K. P., Schulz, H.: Laser-Induced Fluorescence—A Method To Detect the Vitality of Scots Pines, 68:225
Lüdeker, W.: *See* Maier, S. W.
Luther, J. E., Carroll, A. L.: Development of an Index of Balsam Fir Vigor by Foliar Spectral Reflectance, 69:241
Lytle, V. I.: *See* Massom, R. A.

Mackin, S.: *See* Drake, N. A.
Macomber, S.: *See* Carpenter, G. A.
Mah, G. R.: *See* Olson, R. J.
Maier, S. W., Lüdeker, W., Günther, K. P.: SLOP: A Revised Version of the Stochastic Model for Leaf Optical Properties, 68:273
Martens, S.: *See* Carpenter, G. A.
Massom, R. A., Comiso, J. C., Worby, A. P., Lytle, V. I., Stock, L.: Regional Classes of Sea Ice Cover in the East Antarctic Pack Observed from Satellite and *In Situ* Data during a Winter Time Period, 68:61
Matikainen, L.: *See* Koskinen, J.
Mätzler, C., Wiesmann, A.: Extension of the Microwave Emission Model of Layered Snowpacks to Coarse-Grained Snow, 70:317
Mätzler, C.: *See* Weismann, A.
McKee, W. A.: *See* Means, J. E.
Means, J. E., Acker, S. A., Harding, D. J., Blair, J. B., Lefsky, M. A., Cohen, W. B., Harmon, M. E., McKee, W. A.: Use of Large-Footprint Scanning Airborne Lidar to Estimate Forest Stand Characteristics in the Western Cascades of Oregon, 67:298
Meliá, J.: *See* García-Haro, F. J.
Mesarch, M. A., Walter-Shea, E. A., Asner, G. P., Middleton, E. M., Chan, S. S.: A Revised Measurement Methodology for Conifer Needles Spectral Optical Properties: Evaluating the Influence of Gaps between Elements, 68:177
Metsämäki, S.: *See* Koskinen, J.
Middleton, E. M.: *See* Mesarch, M. A.
Milne, B. T., Cohen, W. B.: Multiscale Assessment of Binary and Continuous Landcover Variables for MODIS Validation, Mapping, and Modeling Applications, 70:82
Milton, E. J.: *See* Eckardt, F. D.
Mladenoff, D. J.: *See* Radeloff, V. C.
Morales, F., Belkhodja, R., Goulas, Y., Abadía, J., Moya, I.: Remote and Near-Contact Chlorophyll Fluorescence during Photosynthetic Induction in Iron-Deficient Sugar Beet Leaves, 69:170
Morinaga, S.: *See* Shibayama, M.
Moy, L.: *See* Jackson, T. J.
Moya, I.: *See* Morales, F.
Muller-Karger, F. E.: *See* Zhang, M.
Muraleedharan, P. M.: *See* Ramesh Kumar, M. R.

Nezlin, N. P., Kostianoy, A. G., Gregoire, M.: Patterns of Seasonal and Interannual Changes of Surface Chlorophyll Concentration in the Black Sea Revealed from the Remote Sensed Data, 69:43
Ni, W., Woodcock, C. E., Jupp, D. L. B.: Variance in Bidirectional Reflectance over Discontinuous Plant Canopies, 69:1
Norman, J. M.: *See* Gower, S. T.
North, P. R. J.: *See* Dawson, T. P.

Okayama, H., Wang, L.-Z.: Spatial Coherence Degradation of Light Influenced by Temperature and Aerosol by Use of Atmospheric Turbulence Chamber, 69:189
Olioso, A., Chauki, H., Courault, D., Wigneron, J.-P.: Estimation of Evapotranspiration and Photosynthesis

by Assimilation of Remote Sensing Data into SVAT Models, 68:341
Olioso, A.: *See* Wigneron, J.-P.
Olson, R. J., Briggs, J. M., Porter, J. H., Mah, G. R., Stafford, S. G.: Managing Data from Multiple Disciplines, Scales, and Sites To Support Synthesis and Modeling, 70:99
O'Neill, P. E.: *See* Goyal, S. K.
Ottlé, C., François, C.: Further Insights into the Use of the Split-Window Covariance Technique for Precipitable Water Retrieval, 69:84
Ottlé, C.: *See* Seguin, B.
Ouaidrari, H., Vermote, E. F.: Operational Atmospheric Correction of Landsat TM Data, 70:4
Ouillon, S.: *See* Forget, P.

Paerl, H. W.: *See* Woodruff, D. L.
Palacios-Orueta, A., Pinzón, J. E., Ustin, S. L., Roberts, D. A.: Remote Sensing of Soils in the Santa Monica Mountains: II. Hierarchical Foreground and Background Analysis, 68:138
Parker, G.: *See* Lefsky, M. A.
Parker, G. G.: *See* Lefsky, M. A.
Peddle, D. R., Hall, F. G., LeDrew, E. F.: Spectral Mixture Analysis and Geometric-Optical Reflectance Modeling of Boreal Forest Biophysical Structure, 67:288
Pereira, J. M. C.: *See* Barbosa, P. M.
Peterson, D. L.: *See* Ganapol, B. D.
Phulpin, T.: *See* Seguin, B.
Pichel, W. G.: *See* Friedman, K. S.
Pinzón, J. E.: *See* Palacios-Orueta, A.
Plummer, S. E.: *See* Dawson, T. P.
Porter, J. H.: *See* Olson, R. J.
Prata, A. J., Cechet, R. P.: An Assessment of the Accuracy of Land Surface Temperature Determination from the GMS-5 VISSR, 67:1
Prata, A. J.: *See* Barton, I. J.

Radeloff, V. C., Mladenoff, D. J., Boyce, M. S.: Detecting Jack Pine Budworm Defoliation Using Spectral Mixture Analysis: Separating Effects from Determinants, 69:156
Ramesh Kumar, M. R., Muraleedharan, P. M., Sathe, P. V.: On the Role of Sea Surface Temperature Variability over the Tropical Indian Ocean in Relation to Summer Monsoon Using Satellite Data, 70:238
Reich, P. B., Turner, D. P., Bolstad, P.: An Approach to Spatially Distributed Modeling of Net Primary Production (NPP) at the Landscape Scale and Its Application in Validation of EOS NPP Products, 70:69
Riggs, G. A., Hall, D. K., Ackerman, S. A.: Sea Ice Extent and Classification Mapping with the Moderate Resolution Imaging Spectroradiometer Airborne Simulator, 68:152
Ripple, W. J.: *See* Lawrence, R. L.
Roberts, D. A.: *See* Palacios-Orueta, A.
Ross, W. D.: *See* Abuelgasim, A. A.
Rott, H.: *See* Wagner, W.
Running, S. W., Baldocchi, D. D., Turner, D. P., Gower, S. T., Bakwin, P. S., Hibbard, K. A.: A Global Terrestrial Monitoring Network Integrating Tower Fluxes, Flask Sampling, Ecosystem Modeling and EOS Satellite Data, 70:108

Salli, A.: *See* Shibayama, M.
Salvador, R.: A Parametric Model for Estimating Relations Between Unprecisely Located Field Measurements and Remotely Sensed Data, 67:99
Salvucci, G. D.: *See* Amano, E.
Sanchez-Azofeifa, G. A.: *See* Carlson, T. N.
Sandmeier, St., Deering, D. W.: Structure Analysis and Classification of Boreal Forests Using Airborne Hyperspectral BRDF Data from ASAS, 69:281
Sathe, P. V.: *See* Ramesh Kumar, M. R.
Scambos, T. A., Kvaran, G., Fahnestock, M. A.: Improving AVHRR Resolution Through Data Cumulation for Mapping Polar Ice Sheets, 69:56
Schaber, G. G.: SAR Studies in the Yuma Desert, Arizona: Sand Penetration, Geology, and the Detection of Military Ordnance Debris, 67:320
Schaber, G. G., Breed, C. S.: The Importance of SAR Wavelength in Penetrating Blow Sand in Northern Arizona, 69:87
Schuler, D. L., Lee, J.-S., Ainsworth, T. L.: Compensation of Terrain Azimuthal Slope Effects in Geophysical Parameter Studies Using Polarimetric SAR Data, 69:139
Schulz, H.: *See* Lüdeker, W.
Scope, J. A.: *See* Woodruff, D. L.
Seguin, B., Becker, F., Phulpin, T., Gu, X. F., Guyot, G., Kerr, Y., King, C., Lagouarde, J. P., Ottlé, C., Stoll, M. P., Tabbagh, A., Vidal, A.: IRSUTE: A Minisatellite Project for Land Surface Heat Flux Estimation from Field to Regional Scale, 68:357
Settle, J. J.: *See* Drake, N. A.
Seyfried, M. S.: *See* Goyal, S. K.
Shepherd, J. D.: *See* Dymond, J. R.
Shibayama, M., Salli, A., Häme, T., Iso-Iivari, L., Heino, S., Alanen, M., Morinaga, S., Inoue, Y., Akiyama, T.: Detecting Phenophases of Subarctic Shrub Canopies by Using Automated Reflectance Measurements, 67:160
Shugart, H. H.: *See* Lefsky, M. A.
Slater, P. N.: *See* Dinguirard, M.
Soegaard, H.: *See* Boegh, E.
Spies, T. A.: *See* Lefsky, M. A.
Stafford, S. G.: *See* Olson, R. J.
Steele, C. M.: *See* Blackburn, G. A.
Stock, L.: *See* Massom, R. A.
Stol, W.: *See* Bouman, B. A. M.

Stoll, M. P.: *See* Li, Z.-L.
Stoll, M. P.: *See* Seguin, B.
Strahler, A. H.: *See* Gopal, S.
Stumpf, R. P.: *See* Woodruff, D. L.
Subhash, N., Wenzel, O., Lichtenthaler, H. K.: Changes in Blue-Green and Chlorophyll Fluorescence Emission and Fluorescence Ratios during Senescence of Tobacco Plants, 69:215
Sutton, P. C.: *See* Elvidge, C. D.

Tabbagh, A.: *See* Seguin, B.
Tait, A., Hall, D., Foster, J., Chang, A., Klein, A.: Detection of Snow Cover Using Millimeter-Wave Imaging Radiometer (MIR) Data, 68:53
Thomlinson, J. R., Bolstad, P. V., Cohen, W. B.: Coordinating Methodologies for Scaling Landcover Classifications from Site-Specific to Global: Steps toward Validating Global Map Products, 70:16
Tokola, T., Löfman, S., Erkkilä, A.: Relative Calibration of Multitemporal Landsat Data for Forest Cover Change Detection, 68:1
Trichon, V.: *See* Gastellu-Etchegorry, J. P.
Turner, D. P., Cohen, W. B., Kennedy, R. E., Fassnacht, K. S., Briggs, J. M.: Relationships between Leaf Area Index and Landsat TM Spectral Vegetation Indices across Three Temperate Zone Sites, 70:52
Turner, D. P.: *See* Reich, P. B.
Turner, D. P.: *See* Running, S. W.
Ustin, S. L.: *See* Palacios-Orueta, A.

van der Sanden, J. J., Hoekman, D. H.: Potential of Airborne Radar To Support the Assessment of Land Cover in a Tropical Rain Forest Environment, 68:26
van Kraalingen, D. W. G.: *See* Bouman, B. A. M.
van Leeuwen, H. J. C.: *See* Bouman, B. A. M.
van Leeuwen, W. J. D., Huete, A. R., Laing, T. W.: MODIS Vegetation Index Compositing Approach: A Prototype with AVHRR Data, 69:264
Varjo, J.: *See* Gemmell, F.
Vermote, E. F.: *See* Ouaidrari, H.
Vickery, P. J.: *See* Hill, M. J.
Vidal, A.: *See* Seguin, B.
Vitorello, Í.: *See* Galvão, L. S.

Wagner, W., Lemoine, G., Rott, H.: A Method for Estimating Soil Moisture from ERS Scatterometer and Soil Data, 70:191
Walter-Shea, E. A.: *See* Mesarch, M. A.
Wan, Z.: *See* Li, Z.-L.
Wang, L.-Z.: *See* Okayama, H.
Wang, M.: A Sensitivity Study of the SeaWiFS Atmospheric Correction Algorithm: Effects of Spectral Band Variations, 67:348
Wang, Y. *See* French, N. H. F.
Weiss, M., Baret, F.: Evaluation of Canopy Biophysical Variable Retrieval Performances from the Accumulation of Large Swath Satellite Data, 70:293
Wenzel, O.: *See* Subhash, N.
Wiesmann, A., Mätzler, C.: Microwave Emission Model of Layered Snowpacks, 70:307
Wiesmann, A.: *See* Mätzler, C.
Wigneron, J.-P., Ferrazzoli, P., Olioso, A., Bertuzzi, P., Chanzy, A.: A Simple Approach To Monitor Crop Biomass from C-Band Radar Data, 69:179
Wigneron, J.-P.: *See* Olioso, A.
Woodcock, C. E.: *See* Abuelgasim, A. A.
Woodcock, C. E.: *See* Carpenter, G. A.
Woodcock, C. E.: *See* Gopal, S.
Woodcock, C. E.: *See* Ni, W.
Woodruff, D. L., Stumpf, R. P., Scope, J. A., Paerl, H. W.: Remote Estimation of Water Clarity in Optically Complex Estuarine Waters, 68:41
Worby, A. P.: *See* Massom, R. A.

Zagolski, F.: *See* Gastellu-Etchegorry, J. P.
Zhang, M., Carder, K., Muller-Karger, F. E., Lee, Z., Goldgof, D. B.: Noise Reduction and Atmospheric Correction for Coastal Applications of Landsat Thematic Mapper Imagery, 70:167

Subject Index for Volumes 67–70

Accuracy Assessment

An Assessment of the Accuracy of Land Surface Temperature Determination from the GMS-5 VISSR, A. J. Prata, R. P. Cechet, 67:1

Evaluation of Six Methods for Extracting Relative Emissivity Spectra from Thermal Infrared Images, Z.-L. Li, F. Becker, M. P. Stoll, Z. Wan, 69:197

Fine Spatial Resolution Simulated Satellite Sensor Imagery for Land Cover Mapping in the United Kingdom, P. Aplin, P. M. Atkinson, P. J. Curran, 68:206

A Parametric Model for Estimating Relations Between Unprecisely Located Field Measurements and Remotely Sensed Data, R. Salvador, 67:99

Aerial Imagery

Airborne Digital Camera Image Semivariance for Evaluation of Forest Structural Damage at an Acid Mine Site, J. Lévesque, D. J. King, 68:112

Studying Long-Term Vegetation Dynamics Using Digital Processing of Historical Aerial Photographs, R. Kadmon, R. Harari-Kremer, 68:164

Algorithms

A Sensitivity Study of the SeaWiFS Atmospheric Correction Algorithm: Effects of Spectral Band Variations, M. Wang, 67:348

Altimetry

Calculation of Ice Velocities in the Jakobshavn Isbrae Area Using Airborne Laser Altimetry, W. Abdalati, W. B. Krabill, 67:194

Atmosphere Properties

Difficulties Associated with the Application of Covariance–Variance Techniques to Retrieval of Atmospheric Water Vapor from Satellite Imagery, I. J. Barton, A. J. Prata, 69:76

Evaluation of Six Methods for Extracting Relative Emissivity Spectra from Thermal Infrared Images, Z.-L. Li, F. Becker, M. P. Stoll, Z. Wan, 69:197

Further Insights into the Use of the Split-Window Covariance Technique for Precipitable Water Retrieval, C. Ottlé, C. François, 69:84

Operational Atmospheric Correction of Landsat TM Data, H. Ouaidrari, E. F. Vermote, 70:4

Spatial Coherence Degradation of Light Influenced by Temperature and Aerosol by Use of Atmospheric Turbulence Chamber, H. Okayama, L.-Z. Wang, 69:189

AVHRR

An Algorithm for Extracting Burned Areas from Time Series of AVHRR GAC Data Applied at a Continental Scale, P. M. Barbosa, J.-M. Grégoire, J. M. C. Pereira, 69:253

Improving AVHRR Resolution Through Data Cumulation for Mapping Polar Ice Sheets, T. A. Scambos, G. Kvaran, M. A. Fahnestock, 69:56

Fuzzy Neural Network Classification of Global Land Cover from a 1° AVHRR Data Set, S. Gopal, C. E. Woodcock, A. H. Strahler, 67:230

MODIS Vegetation Index Compositing Approach: A Prototype with AVHRR Data, W. J. D. van Leeuwen, A. R. Huete, T. W. Laing, 69:264

Monitoring Phenological Key Stages and Cycle Duration of Temperate Deciduous Forest Ecosystems with NOAA/AVHRR Data, B. Duchemin, J. Goubier, G. Courrier, 67:68

NOAA-AVHRR Bidirectional Reflectance: Modeling and Application for the Monitoring of a Temperate Forest, B. Duchemin, 67:51

Pasture Land Cover in Eastern Australia from NOAA-AVHRR NDVI and Classified Landsat TM, M. J. Hill, P. J. Vickery, E. P. Furnival, G. E. Donald, 67:32

Remote Estimation of Water Clarity in Optically Complex Estuarine Waters, D. L. Woodruff, R. P. Stumpf, J. A. Scope, H. W. Paerl, 68:41

Satellite Remote Sensing of Land Use Changes in and around San José, Costa Rica, T. N. Carlson, G. A. Sanchez-Azofeifa, 70:247

Snow Monitoring Using Radar and Optical Satellite Data, J. Koskinen, S. Metsämäki, J. Grandell, S. Jänne, L. Matikainen, M. Hallikainen, 69:16

Biochemistry

Spectroscopic Determination of Leaf Biochemistry Using Band-Depth Analysis of Absorption Features

REMOTE SENS. ENVIRON. 70:368–376 (1999)

©Elsevier Science Inc., 1999

655 Avenue of the Americas, New York, NY 10010

0034-4257/99/$–see front matter

and Stepwise Multiple Linear Regression, R. F. Kokaly, R. N. Clark, 67:267

Calibration

Calibration of Space-Multispectral Imaging Sensors: A Review, M. Dinguirard, P. N. Slater, 68:194
Noise Reduction and Atmospheric Correction for Coastal Applications of Landsat Thematic Mapper Imagery, M. Zhang, K. Carder, F. E. Muller-Karger, Z. Lee, D. B. Goldgof, 70:167
Relative Calibration of Multitemporal Landsat Data for Forest Cover Change Detection, T. Tokola, S. Löfman, A. Erkkilä, 68:1

Change Curves

Calculating Change Curves for Multitemporal Satellite Imagery: Mount St. Helens 1980–1995, R. L. Lawrence, W. J. Ripple, 67:309

Change Detection

Change Detection Using Adaptive Fuzzy Neural Networks: Environmental Damage Assessment after the Gulf War, A. A. Abuelgasim, W. D. Ross, S. Gopal, C. E. Woodcock, 70:208
Relative Calibration of Multitemporal Landsat Data for Forest Cover Change Detection, T. Tokola, S. Löfman, A. Erkkilä, 68:1

Chlorophyll

Changes in Blue-Green and Chlorophyll Fluorescence Emission and Fluorescence Ratios during Senescence of Tobacco Plants, N. Subhash, O. Wenzel, H. K. Lichtenthaler, 69:215
The Chlorophyll Fluorescence Ratio F_{735}/F_{700} as an Accurate Measure of the Chlorophyll Content in Plants, A. A. Gitelson, C. Buschmann, H. K. Lichtenthaler, 69:296
Estimating Canopy Chlorophyll Concentration from Field and Airborne Spectra, R. A. Jago, M. E. J. Cutler, P. J. Curran, 68:217
Patterns of Seasonal and Interannual Changes of Surface Chlorophyll Concentration in the Black Sea Revealed from the Remote Sensed Data, N. P. Nezlin, A. G. Kostianoy, M. Gregoire, 69:43
Remote and Near-Contact Chlorophyll Fluorescence during Photosynthetic Induction in Iron-Deficient Sugar Beet Leaves, F. Morales, R. Belkhodja, Y. Goulas, J. Abadía, I. Moya, 69:170
SLOP: A Revised Version of the Stochastic Model for Leaf Optical Properties, S. W. Maier, W. Lüdeker, K. P. Günther, 68:273

Crops

An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, B. A. M. Bouman, D. W. G. van Kraalingen, W. Stol, H. J. C. van Leeuwen, 67:137
Changes in Blue-Green and Chlorophyll Fluorescence Emission and Fluorescence Ratios during Senescence of Tobacco Plants, N. Subhash, O. Wenzel, H. K. Lichtenthaler, 69:215
Remote and Near-Contact Chlorophyll Fluorescence during Photosynthetic Induction in Iron-Deficient Sugar Beet Leaves, F. Morales, R. Belkhodja, Y. Goulas, J. Abadía, I. Moya, 69:170
A Simple Approach To Monitor Crop Biomass from C-Band Radar Data, J.-P. Wigneron, P. Ferrazzoli, A. Olioso, P. Bertuzzi, A. Chanzy, 69:179

Data Management

Evaluation of Canopy Biophysical Variable Retrieval Performances from the Accumulation of Large Swath Satellite Data, M. Weiss, F. Baret, 70:293
A Global Terrestrial Monitoring Network Integrating Tower Fluxes, Flask Sampling, Ecosystem Modeling and EOS Satellite Data, S. W. Running, D. D. Baldocchi, D. P. Turner, S. T. Gower, P. S. Bakwin, K. A. Hibbard, 70:108
Managing Data from Multiple Disciplines, Scales, and Sites To Support Synthesis and Modeling, R. J. Olson, J. M. Briggs, J. H. Porter, G. R. Mah, S. G. Stafford, 70:99

Desert

The Importance of SAR Wavelength in Penetrating Blow Sand in Northern Arizona, G. G. Schaber, C. S. Breed, 69:87
SAR Studies in the Yuma Desert, Arizona: Sand Penetration, Geology, and the Detection of Military Ordnance Debris, G. G. Schaber, 67:320
Spectral Characteristics of Cyanobacteria Soil Crust in Semiarid Environments, A. Karnieli, G. J. Kidron, C. Glaesser, E. Ben-Dor, 69:67

Earth Observing Systems

An Approach to Spatially Distributed Modeling of Net Primary Production (NPP) at the Landscape Scale and Its Application in Validation of EOS NPP Products, P. B. Reich, D. P. Turner, P. Bolstad, 70:69
Coordinating Methodologies for Scaling Landcover Classifications from Site-Specific to Global: Steps toward Validating Global Map Products, J. R. Thomlinson, P. V. Bolstad, W. B. Cohen, 70:16
Direct and Indirect Estimation of Leaf Area Index, f_{APAR}, and Net Primary Production of Terrestrial Ecosystems, S. T. Gower, C. J. Kucharik, J. M. Norman, 70:29
A Global Terrestrial Monitoring Network Integrating Tower Fluxes, Flask Sampling, Ecosystem Modeling and EOS Satellite Data, S. W. Running, D. D.

Baldocchi, D. P. Turner, S. T. Gower, P. S. Bakwin, K. A. Hibbard, 70:108
IRSUTE: A Minisatellite Project for Land Surface Heat Flux Estimation from Field to Regional Scale, B. Seguin, F. Becker, T. Phulpin, X. F. Gu, G. Guyot, Y. Kerr, C. King, J. P. Lagouarde, C. Ottlé, M. P. Stoll, A. Tabbagh, A. Vidal, 68:357
Managing Data from Multiple Disciplines, Scales, and Sites To Support Synthesis and Modeling, R. J. Olson, J. M. Briggs, J. H. Porter, G. R. Mah, S. G. Stafford, 70:99
MODIS Vegetation Index Compositing Approach: A Prototype with AVHRR Data, W. J. D. van Leeuwen, A. R. Huete, T. W. Laing, 69:264
Multiscale Assessment of Binary and Continuous Landcover Variables for MODIS Validation, Mapping, and Modeling Applications, B. T. Milne, W. B. Cohen, 70:82
Operational Atmospheric Correction of Landsat TM Data, H. Ouaidrari, E. F. Vermote, 70:4
Radiance Calibration of DMSP-OLS Low-Light Imaging Data of Human Settlements, C. D. Elvidge, K. E. Baugh, J. B. Dietz, T. Bland, P. C. Sutton, H. W. Kroehl, 68:77
Sea Ice Extent and Classification Mapping with the Moderate Resolution Imaging Spectroradiometer Airborne Simulator, G. A. Riggs, D. K. Hall, S. A. Ackerman, 68:152
Validating MODIS Terrestrial Ecology Products: Linking *In Situ* and Satellite Measurements, W. B. Cohen, C. O. Justice, 70:1

Environmental Damage

Airborne Digital Camera Image Semivariance for Evaluation of Forest Structural Damage at an Acid Mine Site, J. Lévesque, D. J. King, 68:112
An Algorithm for Extracting Burned Areas from Time Series of AVHRR GAC Data Applied at a Continental Scale, P. M. Barbosa, J.-M. Grégoire, J. M. C. Pereira, 69:253
Application of Imaging Spectrometer Data in Identifying Environmental Pollution Caused by Mining at Rodaquilar, Spain, G. Ferrier 68:125
Calculating Change Curves for Multitemporal Satellite Imagery: Mount St. Helens 1980–1995, R. L. Lawrence, W. J. Ripple, 67:309
Change Detection Using Adaptive Fuzzy Neural Networks: Environmental Damage Assessment after the Gulf War, A. A. Abuelgasim, W. D. Ross, S. Gopal, C. E. Woodcock, 70:208
Detecting Jack Pine Budworm Defoliation Using Spectral Mixture Analysis: Separating Effects from Determinants, V. C. Radeloff, D. J. Mladenoff, M. S. Boyce, 69:156
Initial Observations of Radarsat Imagery at Fire-Disturbed Sites in Interior Alaska, N. H. F. French, L. L. Bourgeau-Chavez, Y. Wang, E. S. Kasischke, 68:89

Evaporation

Detection and Use of Three Signatures of Soil-Limited Evaporation, E. Amano, G. D. Salvucci, 67:108

Evapotranspiration

Estimation of Evapotranspiration and Photosynthesis by Assimilation of Remote Sensing Data into SVAT Models, A. Olioso, H. Chauki, D. Courault, J.-P. Wigneron, 68:341

Field Measurements

A Parametric Model for Estimating Relations Between Unprecisely Located Field Measurements and Remotely Sensed Data, R. Salvador, 67:99

Fire

An Algorithm for Extracting Burned Areas from Time Series of AVHRR GAC Data Applied at a Continental Scale, P. M. Barbosa, J.-M. Grégoire, J. M. C. Pereira, 69:253
Initial Observations of Radarsat Imagery at Fire-Disturbed Sites in Interior Alaska, N. H. F. French, L. L. Bourgeau-Chavez, Y. Wang, E. S. Kasischke, 68:89

Fluorescence

Changes in Blue-Green and Chlorophyll Fluorescence Emission and Fluorescence Ratios during Senescence of Tobacco Plants, N. Subhash, O. Wenzel, H. K. Lichtenthaler, 69:215
The Chlorophyll Fluorescence Ratio F_{735}/F_{700} as an Accurate Measure of the Chlorophyll Content in Plants, A. A. Gitelson, C. Buschmann, H. K. Lichtenthaler, 69:296
Laser-Induced Fluorescence—A Method To Detect the Vitality of Scots Pines, W. Lüdeker, H.-G. Dahn, K. P. Günther, H. Schulz, 68:225

Forests

Airborne Digital Camera Image Semivariance for Evaluation of Forest Structural Damage at an Acid Mine Site, J. Lévesque, D. J. King, 68:112
Characterization of the Reflectance Anisotropy of Three Boreal Forest Canopies in Spring–Summer, D. W. Deering, T. F. Eck, B. Banerjee, 67:205
Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry," by Gu and Gillespie (*Remote Sens. Environ.* 64:166–175, 1998), J. R. Dymond, J. D. Shepherd, 69:194
Detecting Jack Pine Budworm Defoliation Using Spectral Mixture Analysis: Separating Effects from

Determinants, V. C. Radeloff, D. J. Mladenoff, M. S. Boyce, 69:156
Development of an Index of Balsam Fir Vigor by Foliar Spectral Reflectance, J. E. Luther, A. L. Carroll, 69:241
Estimating Conifer Forest Cover with Thematic Mapper Data Using Reflectance Model Inversion and Two Spectral Indices in a Site with Variable Background Characteristics, F. Gemmell, 69:105
Laser-Induced Fluorescence—A Method To Detect the Vitality of Scots Pines, W. Lüdeker, H.-G. Dahn, K. P. Günther, H. Schulz, 68:225
Lidar Remote Sensing of the Canopy Structure and Biophysical Properties of Douglas-Fir Western Hemlock Forests, M. A. Lefsky, W. B. Cohen, S. A. Acker, G. G. Parker, T. A. Spies, D. Harding, 70:339
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: I. BRF, J. P. Gastellu-Etchegorry, P. Guillevic, F. Zagolski, V. Demarez, V. Trichon, D. Deering, M. Leroy, 68:281
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: II. PAR Regime, P. Guillevic, J. P. Gastellu-Etchegorry, 68:317
Monitoring Phenological Key Stages and Cycle Duration of Temperate Deciduous Forest Ecosystems with NOAA/AVHRR Data, B. Duchemin, J. Goubier, G. Courrier, 67:68
A Neural Network Method for Mixture Estimation for Vegetation Mapping, G. A. Carpenter, S. Gopal, S. Macomber, S. Martens, C. E. Woodcock, 70:138
NOAA-AVHRR Bidirectional Reflectance: Modeling and Application for the Monitoring of a Temperate Forest, B. Duchemin, 67:51
Potential of Airborne Radar To Support the Assessment of Land Cover in a Tropical Rain Forest Environment, J. J. van der Sanden, D. H. Hoekman, 68:26
The Propagation of Foliar Biochemical Absorption Features in Forest Canopy Reflectance: A Theoretical Analysis, T. P. Dawson, P. J. Curran, P. R. J. North, S. E. Plummer, 67:147
Relative Calibration of Multitemporal Landsat Data for Forest Cover Change Detection, T. Tokola, S. Löfman, A. Erkkilä, 68:1
Response to Dymond and Shepherd's Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry" (*Remote Sens. Environ.* 64:166–175, 1998), D. Gu, A. Gillespie, 69:195
A Revised Measurement Methodology for Conifer Needles Spectral Optical Properties: Evaluating the Influence of Gaps between Elements, M. A. Mesarch, E. A. Walter-Shea, G. P. Asner, E. M. Middleton, S. S. Chan, 68:177
Spectral Mixture Analysis and Geometric-Optical Reflectance Modeling of Boreal Forest Biophysical Structure, D. R. Peddle, F. G. Hall, E. F. LeDrew, 67:288
Structure Analysis and Classification of Boreal Forests Using Airborne Hyperspectral BRDF Data from ASAS, St. Sandmeier, D. W. Deering, 69:281
Surface Lidar Remote Sensing of Basal Area and Biomass in Deciduous Forests of Eastern Maryland, USA, M. A. Lefsky, D. Harding, W. B. Cohen, G. Parker, H. H. Shugart, 67:83
Use of Large-Footprint Scanning Airborne Lidar to Estimate Forest Stand Characteristics in the Western Cascades of Oregon, J. E. Means, S. A. Acker, D. J. Harding, J. B. Blair, M. A. Lefsky, W. B. Cohen, M. E. Harmon, W. A. McKee, 67:298
Utility of Reflectance Model Inversion Versus Two Spectral Indices for Estimating Biophysical Characteristics in a Boreal Forest Test Site, F. Gemmell, J. Varjo, 68:95

Glaciers

Anisotropic Reflection by Melting Glacier Ice: Measurements and Parametrizations in Landsat TM Bands 2 and 4, W. Greuell, M. de Ruyter de Wildt, 70:265
Calculation of Ice Velocities in the Jakobshavn Isbrae Area Using Airborne Laser Altimetry, W. Abdalati, W. B. Krabill, 67:194
The Relationship between Time Since Deglaciation and the Reflectance of Glacial Forelands, F. D. Eckardt, E. J. Milton, 67:244
Routine Monitoring of Changes in the Columbia Glacier, Alaska, with Synthetic Aperture Radar, K. S. Friedman, P. Clemente-Colón, W. G. Pichel, X. Li, 70:257

Hierarchical Foreground and Background Analysis (HFBA)

Remote Sensing of Soils in the Santa Monica Mountains: II. Hierarchical Foreground and Background Analysis, A. Palacios-Orueta, J. E. Pinzón, S. L. Ustin, D. A. Roberts, 68:138

Ice

Improving AVHRR Resolution Through Data Cumulation for Mapping Polar Ice Sheets, T. A. Scambos, G. Kvaran, M. A. Fahnestock, 69:56
Regional Classes of Sea Ice Cover in the East Antarctic Pack Observed from Satellite and *In Situ* Data during a Winter Time Period, R. A. Massom, J. C. Comiso, A. P. Worby, V. I. Lytle, L. Stock, 68:61
Sea Ice Extent and Classification Mapping with the Moderate Resolution Imaging Spectroradiometer Airborne Simulator, G. A. Riggs, D. K. Hall, S. A. Ackerman, 68:152

Imaging Spectrometry
Application of Imaging Spectrometer Data in Identifying Environmental Pollution Caused by Mining at Rodaquilar, Spain, G. Ferrier 68:125
Calibration of Space-Multispectral Imaging Sensors: A Review, M. Dinguirard, P. N. Slater, 68:194
Estimating Canopy Chlorophyll Concentration from Field and Airborne Spectra, R. A. Jago, M. E. J. Cutler, P. J. Curran, 68:217
Extraction of Endmembers from Spectral Mixtures, F. J. García-Haro, M. A. Gilabert, J. Meliá, 68:237
Fine Spatial Resolution Simulated Satellite Sensor Imagery for Land Cover Mapping in the United Kingdom, P. Aplin, P. M. Atkinson, P. J. Curran, 68:206

Land Classification
Coordinating Methodologies for Scaling Landcover Classifications from Site-Specific to Global: Steps toward Validating Global Map Products, J. R. Thomlinson, P. V. Bolstad, W. B. Cohen, 70:16
Fuzzy Neural Network Classification of Global Land Cover from a 1° AVHRR Data Set, S. Gopal, C. E. Woodcock, A. H. Strahler, 67:230
A Neural Network Method for Mixture Estimation for Vegetation Mapping, G. A. Carpenter, S. Gopal, S. Macomber, S. Martens, C. E. Woodcock, 70:138

Landsat TM
Anisotropic Reflection by Melting Glacier Ice: Measurements and Parametrizations in Landsat TM Bands 2 and 4, W. Greuell, M. de Ruyter de Wildt, 70:265
Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry," by Gu and Gillespie (*Remote Sens. Environ.* 64:166–175, 1998), J. R. Dymond, J. D. Shepherd, 69:194
Comparison between the Results of a Snow Metamorphism Model and Remote Sensing Derived Snow Parameters in the Alps, M. Fily, J. P. Dedieu, Y. Durand, 68:254
Estimating Conifer Forest Cover with Thematic Mapper Data Using Reflectance Model Inversion and Two Spectral Indices in a Site with Variable Background Characteristics, F. Gemmell, 69:105
Extraction of Endmembers from Spectral Mixtures, F. J. García-Haro, M. A. Gilabert, J. Meliá, 68:237
Noise Reduction and Atmospheric Correction for Coastal Applications of Landsat Thematic Mapper Imagery, M. Zhang, K. Carder, F. E. Muller-Karger, Z. Lee, D. B. Goldgof, 70:167
Operational Atmospheric Correction of Landsat TM Data, H. Ouaidrari, E. F. Vermote, 70:4
Pasture Land Cover in Eastern Australia from NOAA-AVHRR NDVI and Classified Landsat TM, M. J. Hill, P. J. Vickery, E. P. Furnival, G. E. Donald, 67:32
Relationships between Leaf Area Index and Landsat TM Spectral Vegetation Indices across Three Temperate Zone Sites, D. P. Turner, W. B. Cohen, R. E. Kennedy, K. S. Fassnacht, J. M. Briggs, 70:52
Relative Calibration of Multitemporal Landsat Data for Forest Cover Change Detection, T. Tokola, S. Löfman, A. Erkkilä, 68:1
Response to Dymond and Shepherd's Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry" (*Remote Sens. Environ.* 64:166–175, 1998), D. Gu, A. Gillespie, 69:195
Spatial Scaling of a Remotely Sensed Surface Parameter by Contexture, J. M. Chen, 69:30

Leaf Area Index
Direct and Indirect Estimation of Leaf Area Index, f_{APAR}, and Net Primary Production of Terrestrial Ecosystems, S. T. Gower, C. J. Kucharik, J. M. Norman, 70:29
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: I. BRF, J. P. Gastellu-Etchegorry, P. Guillevic, F. Zagolski, V. Demarez, V. Trichon, D. Deering, M. Leroy, 68:281
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: II. PAR Regime, P. Guillevic, J. P. Gastellu-Etchegorry, 68:317
Relationships between Leaf Area Index and Landsat TM Spectral Vegetation Indices across Three Temperate Zone Sites, D. P. Turner, W. B. Cohen, R. E. Kennedy, K. S. Fassnacht, J. M. Briggs, 70:52
Relationships between Spectral Reflectance and Pigment Concentrations in Stacks of Deciduous Broadleaves, G. A. Blackburn, 70:224
Spatial Scaling of a Remotely Sensed Surface Parameter by Contexture, J. M. Chen, 69:30

Lidar
Laser-Induced Fluorescence—A Method To Detect the Vitality of Scots Pines, W. Lüdeker, H.-G. Dahn, K. P. Günther, H. Schulz, 68:225
Lidar Remote Sensing of the Canopy Structure and Biophysical Properties of Douglas-Fir Western Hemlock Forests, M. A. Lefsky, W. B. Cohen, S. A. Acker, G. G. Parker, T. A. Spies, D. Harding, 70:339
Surface Lidar Remote Sensing of Basal Area and Biomass in Deciduous Forests of Eastern Maryland, USA, M. A. Lefsky, D. Harding, W. B. Cohen, G. Parker, H. H. Shugart, 67:83
Use of Large-Footprint Scanning Airborne Lidar to Estimate Forest Stand Characteristics in the Western Cascades of Oregon, J. E. Means, S. A. Acker, D. J. Harding, J. B. Blair, M. A. Lefsky, W. B. Cohen, M. E. Harmon, W. A. McKee, 67:298

Measurement Techniques
Difficulties Associated with the Application of Covariance–Variance Techniques to Retrieval of Atmospheric Water Vapor from Satellite Imagery, I. J. Barton, A. J. Prata, 69:76
Further Insights into the Use of the Split-Window Covariance Technique for Precipitable Water Retrieval, C. Ottlé, C. François, 69:84
A Revised Measurement Methodology for Conifer Needles Spectral Optical Properties: Evaluating the Influence of Gaps between Elements, M. A. Mesarch, E. A. Walter-Shea, G. P. Asner, E. M. Middleton, S. S. Chan, 68:177

Millimeter-Wave Imaging Radiometer (MIR)
Detection of Snow Cover Using Millimeter-Wave Imaging Radiometer (MIR) Data, A. Tait, D. Hall, J. Foster, A. Chang, A. Klein, 68:53

Mixture Models
Mapping Vegetation, Soils, and Geology in Semiarid Shrublands Using Spectral Matching and Mixture Modeling of SWIR AVIRIS Imagery, N. A. Drake, S. Mackin, J. J. Settle, 68:12

Ocean
Reflection of Spectral Sky Irradiance on the Surface of the Sea and Related Properties, E. Aas, J. Høkedal, 70:181
Regional Classes of Sea Ice Cover in the East Antarctic Pack Observed from Satellite and *In Situ* Data during a Winter Time Period, R. A. Massom, J. C. Comiso, A. P. Worby, V. I. Lytle, L. Stock, 68:61
On the Role of Sea Surface Temperature Variability over the Tropical Indian Ocean in Relation to Summer Monsoon Using Satellite Data, M. R. Ramesh Kumar, P. M. Muraleedharan, P. V. Sathe, 70:238
Sea Ice Extent and Classification Mapping with the Moderate Resolution Imaging Spectroradiometer Airborne Simulator, G. A. Riggs, D. K. Hall, S. A. Ackerman, 68:152

Ocean Color
Patterns of Seasonal and Interannual Changes of Surface Chlorophyll Concentration in the Black Sea Revealed from the Remote Sensed Data, N. P. Nezlin, A. G. Kostianoy, M. Gregoire, 69:43
A Sensitivity Study of the SeaWiFS Atmospheric Correction Algorithm: Effects of Spectral Band Variations, M. Wang, 67:348

Passive Microwave
Dew Effects on Passive Microwave Observations of Land Surfaces, T. J. Jackson, L. Moy, 70:129

Photosynthesis
Estimation of Evapotranspiration and Photosynthesis by Assimilation of Remote Sensing Data into SVAT Models, A. Olioso, H. Chauki, D. Courault, J.-P. Wigneron, 68:341
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: II. PAR Regime, P. Guillevic, J. P. Gastellu-Etchegorry, 68:317
Remote and Near-Contact Chlorophyll Fluorescence during Photosynthetic Induction in Iron-Deficient Sugar Beet Leaves, F. Morales, R. Belkhodja, Y. Goulas, J. Abadía, I. Moya, 69:170

Radar
An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, B. A. M. Bouman, D. W. G. van Kraalingen, W. Stol, H. J. C. van Leeuwen, 67:137
Compensation of Terrain Azimuthal Slope Effects in Geophysical Parameter Studies Using Polarimetric SAR Data, D. L. Schuler, J.-S. Lee, T. L. Ainsworth, 69:139
Correction of Surface Roughness and Topographic Effects on Airborne SAR in Mountainous Rangeland Areas, S. K. Goyal, M. S. Seyfried, P. E. O'Neill, 67:124
The Importance of SAR Wavelength in Penetrating Blow Sand in Northern Arizona, G. G. Schaber, C. S. Breed, 69:87
Initial Observations of Radarsat Imagery at Fire-Disturbed Sites in Interior Alaska, N. H. F. French, L. L. Bourgeau-Chavez, Y. Wang, E. S. Kasischke, 68:89
A Method for Estimating Soil Moisture from ERS Scatterometer and Soil Data, W. Wagner, G. Lemoine, H. Rott, 70:191
Potential of Airborne Radar To Support the Assessment of Land Cover in a Tropical Rain Forest Environment, J. J. van der Sanden, D. H. Hoekman, 68:26
Relating Radar Backscatter to Biophysical Properties of Temperate Perennial Grassland, M. J. Hill, G. E. Donald, P. J. Vickery, 67:15
Routine Monitoring of Changes in the Columbia Glacier, Alaska, with Synthetic Aperture Radar, K. S. Friedman, P. Clemente-Colón, W. G. Pichel, X. Li, 70:257
SAR Studies in the Yuma Desert, Arizona: Sand Penetration, Geology, and the Detection of Military Ordnance Debris, G. G. Schaber, 67:320
A Simple Approach To Monitor Crop Biomass from C-Band Radar Data, J.-P. Wigneron, P. Ferrazzoli, A. Olioso, P. Bertuzzi, A. Chanzy, 69:179
Snow Monitoring Using Radar and Optical Satellite Data, J. Koskinen, S. Metsämäki, J. Grandell, S. Jänne, L. Matikainen, M. Hallikainen, 69:16

Radiation Modeling
An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, B. A. M. Bouman, D. W. G. van Kraalingen, W. Stol, H. J. C. van Leeuwen, 67:137
Extension of the Microwave Emission Model of Layered Snowpacks to Coarse-Grained Snow, C. Mätzler, A. Wiesmann, 70:317
Microwave Emission Model of Layered Snowpacks, A. Wiesmann, C. Mätzler, 70:307
NOAA-AVHRR Bidirectional Reflectance: Modeling and Application for the Monitoring of a Temperate Forest, B. Duchemin, 67:51

Radiative Transfer Model
LCM2: A Coupled Leaf/Canopy Radiative Transfer Model, B. D. Ganapol, L. F. Johnson, C. A. Hlavka, D. L. Peterson, B. Bond, 70:153

Reflectance Measurements
Characterization of the Reflectance Anisotropy of Three Boreal Forest Canopies in Spring–Summer, D. W. Deering, T. F. Eck, B. Banerjee, 67:205
Development of an Index of Balsam Fir Vigor by Foliar Spectral Reflectance, J. E. Luther, A. L. Carroll, 69:241
Inversion of Reflectance Spectra of Nonchlorophyllous Turbid Coastal Waters, P. Forget, S. Ouillon, F. Lahet, P. Broche, 68:264
A Method of Biophysical Parameter Retrieval at Global Scale by Inversion of a Vegetation Reflectance Model, P. Bicheron, M. Leroy, 67:251
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: I. BRF, J. P. Gastellu-Etchegorry, P. Guillevic, F. Zagolski, V. Demarez, V. Trichon, D. Deering, M. Leroy, 68:281
Modeling BRF and Radiation Regime of Boreal and Tropical Forests: II. PAR Regime, P. Guillevic, J. P. Gastellu-Etchegorry, 68:317
MODIS Vegetation Index Compositing Approach: A Prototype with AVHRR Data, W. J. D. van Leeuwen, A. R. Huete, T. W. Laing, 69:264
Reflection of Spectral Sky Irradiance on the Surface of the Sea and Related Properties, E. Aas, J. Høkedal, 70:181
The Relationship between Time Since Deglaciation and the Reflectance of Glacial Forelands, F. D. Eckardt, E. J. Milton, 67:244
SLOP: A Revised Version of the Stochastic Model for Leaf Optical Properties, S. W. Maier, W. Lüdeker, K. P. Günther, 68:273
Spectral Mixture Analysis and Geometric-Optical Reflectance Modeling of Boreal Forest Biophysical Structure, D. R. Peddle, F. G. Hall, E. F. LeDrew, 67:288
Structure Analysis and Classification of Boreal Forests Using Airborne Hyperspectral BRDF Data from ASAS, St. Sandmeier, D. W. Deering, 69:281
Utility of Reflectance Model Inversion Versus Two Spectral Indices for Estimating Biophysical Characteristics in a Boreal Forest Test Site, F. Gemmell, J. Varjo, 68:95
Variance in Bidirectional Reflectance over Discontinuous Plant Canopies, W. Ni, C. E. Woodcock, D. L. B. Jupp, 69:1

Rivers
Inversion of Reflectance Spectra of Nonchlorophyllous Turbid Coastal Waters, P. Forget, S. Ouillon, F. Lahet, P. Broche, 68:264
Remote Estimation of Water Clarity in Optically Complex Estuarine Waters, D. L. Woodruff, R. P. Stumpf, J. A. Scope, H. W. Paerl, 68:41

Snow
Comparison between the Results of a Snow Metamorphism Model and Remote Sensing Derived Snow Parameters in the Alps, M. Fily, J. P. Dedieu, Y. Durand, 68:254
Detection of Snow Cover Using Millimeter-Wave Imaging Radiometer (MIR) Data, A. Tait, D. Hall, J. Foster, A. Chang, A. Klein, 68:53
Extension of the Microwave Emission Model of Layered Snowpacks to Coarse-Grained Snow, C. Mätzler, A. Wiesmann, 70:317
Microwave Emission Model of Layered Snowpacks, A. Wiesmann, C. Mätzler, 70:307
Snow Monitoring Using Radar and Optical Satellite Data, J. Koskinen, S. Metsämäki, J. Grandell, S. Jänne, L. Matikainen, M. Hallikainen, 69:16

Soil Properties
Detection and Use of Three Signatures of Soil-Limited Evaporation, E. Amano, G. D. Salvucci, 67:108
A Method for Estimating Soil Moisture from ERS Scatterometer and Soil Data, W. Wagner, G. Lemoine, H. Rott, 70:191
Remote Sensing of Soils in the Santa Monica Mountains: II. Hierarchical Foreground and Background Analysis, A. Palacios-Orueta, J. E. Pinzón, S. L. Ustin, D. A. Roberts, 68:138
Spectral Characteristics of Cyanobacteria Soil Crust in Semiarid Environments, A. Karnieli, G. J. Kidron, C. Glaesser, E. Ben-Dor, 69:67

Spatial Scaling
Spatial Scaling of a Remotely Sensed Surface Parameter by Contexture, J. M. Chen, 69:30

Spectral Indices
Estimating Conifer Forest Cover with Thematic Mapper Data Using Reflectance Model Inversion and

Two Spectral Indices in a Site with Variable Background Characteristics, F. Gemmell, 69:105
Utility of Reflectance Model Inversion Versus Two Spectral Indices for Estimating Biophysical Characteristics in a Boreal Forest Test Site, F. Gemmell, J. Varjo, 68:95

Spectroradiometry
Detecting Jack Pine Budworm Defoliation Using Spectral Mixture Analysis: Separating Effects from Determinants, V. C. Radeloff, D. J. Mladenoff, M. S. Boyce, 69:156
Detecting Phenophases of Subarctic Shrub Canopies by Using Automated Reflectance Measurements, M. Shibayama, A. Salli, T. Häme, L. Iso-Iivari, S. Heino, M. Alanen, S. Morinaga, Y. Inoue, T. Akiyama, 67:160
Effects of Band Positioning and Bandwidth on NDVI Measurements of Tropical Savannas, L. D. Galvão, Í. Vitorello, R. A. Filho, 67:181
Mapping Vegetation, Soils, and Geology in Semiarid Shrublands Using Spectral Matching and Mixture Modeling of SWIR AVIRIS Imagery, N. A. Drake, S. Mackin, J. J. Settle, 68:12
Spectroscopic Determination of Leaf Biochemistry Using Band-Depth Analysis of Absorption Features and Stepwise Multiple Linear Regression, R. F. Kokaly, R. N. Clark, 67:267
Towards the Remote Sensing of Matorral Vegetation Physiology: Relationships between Spectral Reflectance, Pigment, and Biophysical Characteristics of Semiarid Bushland Canopies, G. A. Blackburn, C. M. Steele, 70:278

Statistics
A Parametric Model for Estimating Relations Between Unprecisely Located Field Measurements and Remotely Sensed Data, R. Salvador, 67:99

Thermal Measurements
An Assessment of the Accuracy of Land Surface Temperature Determination from the GMS-5 VISSR, A. J. Prata, R. P. Cechet, 67:1
Evaluation of Six Methods for Extracting Relative Emissivity Spectra from Thermal Infrared Images, Z.-L. Li, F. Becker, M. P. Stoll, Z. Wan, 69:197
IRSUTE: A Minisatellite Project for Land Surface Heat Flux Estimation from Field to Regional Scale, B. Seguin, F. Becker, T. Phulpin, X. F. Gu, G. Guyot, Y. Kerr, C. King, J. P. Lagouarde, C. Ottlé, M. P. Stoll, A. Tabbagh, A. Vidal, 68:357
A Remote Sensing Study of the NDVI–T_s Relationship and the Transpiration from Sparse Vegetation in the Sahel Based on High-Resolution Satellite Data, E. Boegh, H. Soegaard, N. Hanan, P. Kabat, L. Lesch, 69:224
On the Role of Sea Surface Temperature Variability over the Tropical Indian Ocean in Relation to Summer Monsoon Using Satellite Data, M. R. Ramesh Kumar, P. M. Muraleedharan, P. V. Sathe, 70:238

Topography
Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry," by Gu and Gillespie (*Remote Sens. Environ.* 64:166–175, 1998), J. R. Dymond, J. D. Shepherd, 69:194
Compensation of Terrain Azimuthal Slope Effects in Geophysical Parameter Studies Using Polarimetric SAR Data, D. L. Schuler, J.-S. Lee, T. L. Ainsworth, 69:139
Correction of Surface Roughness and Topographic Effects on Airborne SAR in Mountainous Rangeland Areas, S. K. Goyal, M. S. Seyfried, P. E. O'Neill, 67:124
Response to Dymond and Shepherd's Comment on "Topographic Normalization of Landsat TM Images of Forest Based on Subpixel Sun–Canopy–Sensor Geometry" (*Remote Sens. Environ.* 64:166–175, 1998), D. Gu, A. Gillespie, 69:195

Urban
Radiance Calibration of DMSP-OLS Low-Light Imaging Data of Human Settlements, C. D. Elvidge, K. E. Baugh, J. B. Dietz, T. Bland, P. C. Sutton, H. W. Kroehl, 68:77
Satellite Remote Sensing of Land Use Changes in and around San José, Costa Rica, T. N. Carlson, G. A. Sanchez-Azofeifa, 70:247

Vegetation Indices
An Agroecological Modeling Approach to Explain ERS SAR Radar Backscatter of Agricultural Crops, B. A. M. Bouman, D. W. G. van Kraalingen, W. Stol, H. J. C. van Leeuwen, 67:137
Airborne Digital Camera Image Semivariance for Evaluation of Forest Structural Damage at an Acid Mine Site, J. Lévesque, D. J. King, 68:112
Calculating Change Curves for Multitemporal Satellite Imagery: Mount St. Helens 1980–1995, R. L. Lawrence, W. J. Ripple, 67:309
Detecting Phenophases of Subarctic Shrub Canopies by Using Automated Reflectance Measurements, M. Shibayama, A. Salli, T. Häme, L. Iso-Iivari, S. Heino, M. Alanen, S. Morinaga, Y. Inoue, T. Akiyama, 67:160
Direct and Indirect Estimation of Leaf Area Index, f_{APAR}, and Net Primary Production of Terrestrial Ecosystems, S. T. Gower, C. J. Kucharik, J. M. Norman, 70:29
Effects of Band Positioning and Bandwidth on NDVI

Measurements of Tropical Savannas, L. D. Galvão, Í. Vitorello, R. A. Filho, 67:181
Lidar Remote Sensing of the Canopy Structure and Biophysical Properties of Douglas-Fir Western Hemlock Forests, M. A. Lefsky, W. B. Cohen, S. A. Acker, G. G. Parker, T. A. Spies, D. Harding, 70:339
A Method of Biophysical Parameter Retrieval at Global Scale by Inversion of a Vegetation Reflectance Model, P. Bicheron, M. Leroy, 67:251
MODIS Vegetation Index Compositing Approach: A Prototype with AVHRR Data, W. J. D. van Leeuwen, A. R. Huete, T. W. Laing, 69:264
Pasture Land Cover in Eastern Australia from NOAA-AVHRR NDVI and Classified Landsat TM, M. J. Hill, P. J. Vickery, E. P. Furnival, G. E. Donald, 67:32
Potential of Airborne Radar To Support the Assessment of Land Cover in a Tropical Rain Forest Environment, J. J. van der Sanden, D. H. Hoekman, 68:26
Relating Radar Backscatter to Biophysical Properties of Temperate Perennial Grassland, M. J. Hill, G. E. Donald, P. J. Vickery, 67:15
Relationships between Leaf Area Index and Landsat TM Spectral Vegetation Indices across Three Temperate Zone Sites, D. P. Turner, W. B. Cohen, R. E. Kennedy, K. S. Fassnacht, J. M. Briggs, 70:52
Satellite Remote Sensing of Land Use Changes in and around San José, Costa Rica, T. N. Carlson, G. A. Sanchez-Azofeifa, 70:247
Studying Long-Term Vegetation Dynamics Using Digital Processing of Historical Aerial Photographs, R. Kadmon, R. Harari-Kremer, 68:164

Vegetation Mapping

Fine Spatial Resolution Simulated Satellite Sensor Imagery for Land Cover Mapping in the United Kingdom, P. Aplin, P. M. Atkinson, P. J. Curran, 68:206
Mapping Vegetation, Soils, and Geology in Semiarid Shrublands Using Spectral Matching and Mixture Modeling of SWIR AVIRIS Imagery, N. A. Drake, S. Mackin, J. J. Settle, 68:12
Multiscale Assessment of Binary and Continuous Landcover Variables for MODIS Validation, Mapping, and Modeling Applications, B. T. Milne, W. B. Cohen, 70:82
A Neural Network Method for Efficient Vegetation Mapping, G. A. Carpenter, S. Gopal, S. Macomber, S. Martens, C. E. Woodcock, J. Franklin, 70:326
A Neural Network Method for Mixture Estimation for Vegetation Mapping, G. A. Carpenter, S. Gopal, S. Macomber, S. Martens, C. E. Woodcock, 70:138

Vegetation Properties

Evaluation of Canopy Biophysical Variable Retrieval Performances from the Accumulation of Large Swath Satellite Data, M. Weiss, F. Baret, 70:293
LCM2: A Coupled Leaf/Canopy Radiative Transfer Model, B. D. Ganapol, L. F. Johnson, C. A. Hlavka, D. L. Peterson, B. Bond, 70:153
The Propagation of Foliar Biochemical Absorption Features in Forest Canopy Reflectance: A Theoretical Analysis, T. P. Dawson, P. J. Curran, P. R. J. North, S. E. Plummer, 67:147
Relationships between Spectral Reflectance and Pigment Concentrations in Stacks of Deciduous Broadleaves, G. A. Blackburn, 70:224
A Remote Sensing Study of the NDVI–T_s Relationship and the Transpiration from Sparse Vegetation in the Sahel Based on High-Resolution Satellite Data, E. Boegh, H. Soegaard, N. Hanan, P. Kabat, L. Lesch, 69:224
Structure Analysis and Classification of Boreal Forests Using Airborne Hyperspectral BRDF Data from ASAS, St. Sandmeier, D. W. Deering, 69:281
Towards the Remote Sensing of Matorral Vegetation Physiology: Relationships between Spectral Reflectance, Pigment, and Biophysical Characteristics of Semiarid Bushland Canopies, G. A. Blackburn, C. M. Steele, 70:278
Variance in Bidirectional Reflectance over Discontinuous Plant Canopies, W. Ni, C. E. Woodcock, D. L. B. Jupp, 69:1

Water Properties

Dew Effects on Passive Microwave Observations of Land Surfaces, T. J. Jackson, L. Moy, 70:129
Difficulties Associated with the Application of Covariance–Variance Techniques to Retrieval of Atmospheric Water Vapor from Satellite Imagery, I. J. Barton, A. J. Prata, 69:76
Further Insights into the Use of the Split-Window Covariance Technique for Precipitable Water Retrieval, C. Ottlé, C. François, 69:84
Noise Reduction and Atmospheric Correction for Coastal Applications of Landsat Thematic Mapper Imagery, M. Zhang, K. Carder, F. E. Muller-Karger, Z. Lee, D. B. Goldgof, 70:167
Remote Estimation of Water Clarity in Optically Complex Estuarine Waters, D. L. Woodruff, R. P. Stumpf, J. A. Scope, H. W. Paerl, 68:41